

How do academic librarians provide effective chemistry instruction and support while retaining current disciplinary knowledge and expertise?

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- A naturalistic inquiry on how academic librarians perceive their roles supporting research and learning
- Surveyed Canadian academic librarians that support chemistry instruction and consultations, followed by focus groups
 - O Sent to 64 librarians at 59 Canadian institutions: 48 responses (75% response rate)
 - 4 focus groups (8 participants)
- Next steps: Analyze data to identify and document strategies to be sustainable + create a manuscript for publication

Chemistry Librarianship – How do you measure up? Findings

Most librarians feel somewhat confident supporting instruction and research requests.

Chemistry Librarianship – How do you measure up? Findings

A significant number of academic librarians that provide instruction and research support have limited specific subject experience, academic backgrounds and years of service.

Chemistry Librarianship – How do you measure up? Findings

The larger the institution, the longer the experience as an academic librarian, those with advanced subject knowledge, serving in institutions with graduate and doctoral programs, and those *without* administrative responsibilities tended to be more confident in their abilities.

Have you ever come away from a research consultation or instructional session feeling like an imposter?

Do you wonder prior to meeting with researchers if you'll be outed due to your limited knowledge and subject expertise?

Are you the liaison librarian for a particular subject area as a side responsibility, in addition to your primary functional or administrative role?

Are you filling in for someone on a functional team or taking charge for a subject area you have little to no direct knowledge of?

This panel presentation and Q&A will provide a platform to share the stories of those affected by these circumstances. It will also give us an opportunity to collectively imagine how subject librarians with varying priorities, experiences, and backgrounds can work together to build confidence & capacity and form sustainable networks of support.

Maddy Gerbig

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How do you build confidence and remain sustainable as a librarian learning a new subject area alongside your other responsibilities?

What are your academic degrees in addition to your library MLIS/MLS/LIS/MI library/information degree?

We had 45 responses to this question:

- Chemistry specific: 4
 - BSc (4), MSc (3), PhD (1)
- At least 1 degree in Science / STEM (non-chemistry): 29
 - o BSc, MSc, BEng
- Non-science: 12
 - History, English Literature, Anthropology, Arts, Humanities, and more.

How does your academic background and experience help you support education and research?

"Having taken some undergraduate chemistry courses [I] have some familiarity with the concepts and terminology, but not enough to fulfill what a "chemistry librarian" needs. Some experience teaching library skills in other sciences is transferable to chemistry."

How does your academic background and experience help you support education and research?

"I took 3 first-year chemistry courses in university, but to be honest my high school chemistry experience was **probably enough** info to be able to support **chemistry research**. Generally being comfortable with science made it easy to support chemistry. It is not hard to learn the things I need to know."

How do you build confidence and remain sustainable as a librarian learning a new subject area and alongside your other responsibilities?

- Own what you know, and what you don't know. Accept that you will never know everything, and that the learning never stops.
- Recognize the time that learning takes and the value & impact it brings to our work.
- Get comfortable with "good enough" and don't let feelings of fear or inadequacy hold you back. Jump in even if you don't feel ready.
- Tap into the strengths and knowledge of colleagues. Resist the urge to compare and don't be afraid to reach out!

How do you build confidence and remain sustainable as a librarian learning a new subject area alongside your other responsibilities?

April Colosimo

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Liaison Librarian for Chemistry, Physics, Mathematics & Statistics; McGill Community for Lifelong Learning



What are your responsibilities in addition to your role as chemistry librarian?

We had 47 responses to this question:

- Chemistry liaison responsibilities (4)
- Other liaison areas (16)
- Functional (5)
- Compound liaison and functional responsibilities (16)
- Administrative role in addition to liaison (6)

How do you use artificial intelligence in your instruction and professional practice?

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We had 43 responses to this question:

- Yes, I do use it: 12
- Yes, but I do not use it much: 10
- I do not use it knowingly: 4
- No, I do not use it / I do not use it yet: 17

How do you use artificial intelligence in your instruction and professional practice?

"One thing I've tried using LLMs for is to brainstorm search examples for my instruction as well as generating sample lesson plans since I do not have a chemistry background, I sometimes find it challenging and time-intensive to identify relevant examples that do a good job of illustrating different search strategies. I have had limited success with this so far, but will keep exploring."

How do you keep up with emerging technologies, like generative AI?

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- Finding your entry point
- Scheduling learning (engagement/play/contemplation)
- Incorporating topics into what you are already doing (a little at a time)

How do you keep up with emerging technologies, like AI?

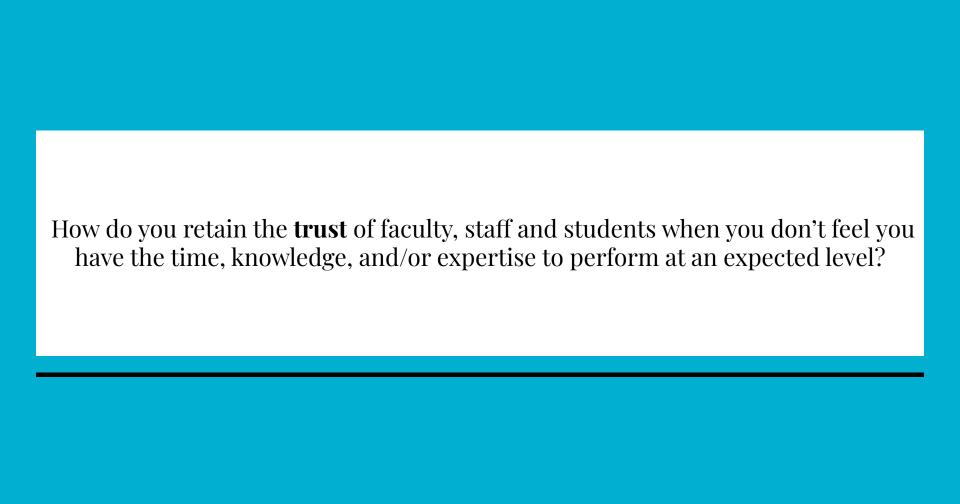
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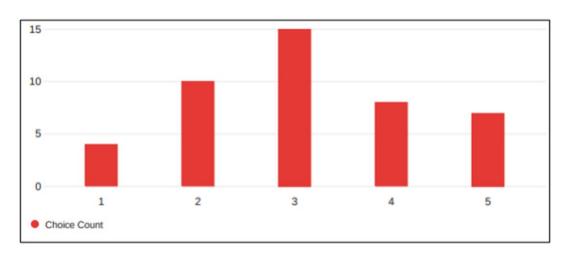
https://brocku.ca/library/ian-gordon/ Brock University Library

Functional Team librarian for faculities of Mathematics & Science (includes Chemistry), and Applied Health Sciences





How confident are you in your ability to provide library support for research/instruction on a scale of 1 to 5 with 5 being most confident?



47 responses

I do think many aspects of my role would be easier (especially building relationships and trust with faculty and students) if I had an academic background in...

....I think too many academic librarians fail to realize that subject expertise is everything when building trust, capacity and share research skills... Without this knowledge librarians ... are too often sidelined or ignored at their peril.

I suffer from the imposter syndrome from time to time and wonder whether faculty, staff and students hesitate to ask for assistance... but I do the best I can with what I know and experience... so I've never felt very confident in chemistry.

I am also liaison librarian for Anthropology, Biology, Child and Family Studies, Computer Science, Criminal Justice, Education, Environmental Studies, Geography, Indigenous Studies, Math, Nursing, Physical and Health Education, Psychology, Religions and Cultures, Social Welfare and Social Development, Social Work, Sociology, I do instruction, reference, collection development, etc.

Strategy #1

Quit beating yourself up!

Remember... you are the information expert in this discussion.

Give yourself more credit than your realize about your impact.

Building trust and relationships takes time, energy, and patience!

e.g. be up front and transparent about your abilities

Strategy #2

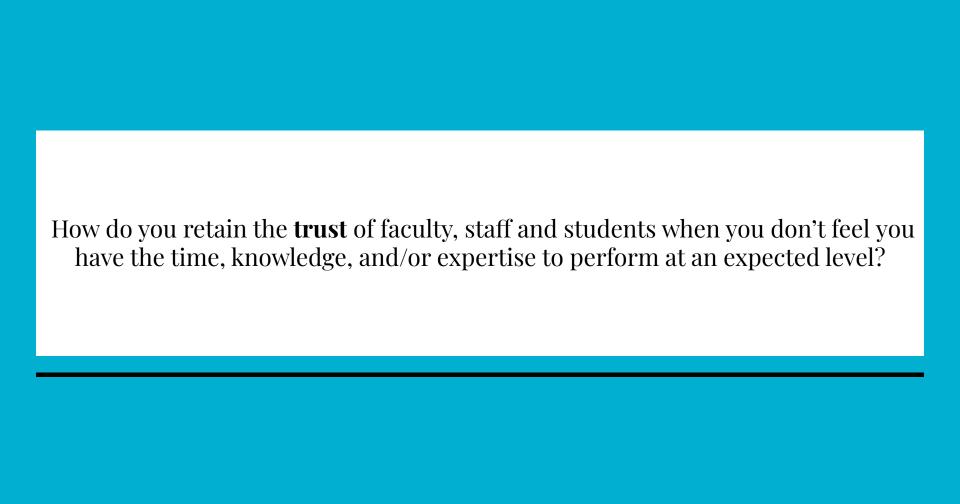
Claiming the label of having imposter syndrome can be a relief – it can allow you to articulate your struggle, and to develop a shared understanding of it with others.

e.g. Reach out to colleagues, we see you, create a disciplinary community of practice...

Strategy #3

Be kind to yourself. Embracing a beginner's mindset can be empowering. Give yourself permission to apply yourself, ask questions, get help, read, read, and read, consult, and move through these feelings. Know that you are not alone!

e.g. Connect with a faculty member that is willing to engage in intentional conversations.



How can academic librarians with varying backgrounds work together to build confidence & capacity and form sustainable networks of support?

Any further comments?

We appreciate your support!

Kaelan, Maddy, Ian & April

No real chemistry background, I hesitate to become fully engaged in instruction and support as I don't really speak chemistry very well.

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I suffer from the imposter syndrome from time to time and wonder whether faculty, staff and students hesitate to ask for assistance... but I do the best I can with what I know and experience... so I've never felt very confident in chemistry.

I absolutely think that it is possible to be a successful chemistry librarian without an academic background in chemistry ...it requires significant time, effort, and commitment to develop confidence and expertise in providing robust research and curriculum support.

To be an academic librarian these days is to struggle to provide adequate services with inadequate resources.

My institution is a small place. I am stretched very thin, I'm not so much the Chemistry Librarian as the librarian this department should contact when they need help from the librarian. I just don't have time to do any more than that.

I am also liaison librarian for Anthropology, Biology, Child and Family Studies, Computer Science, Criminal Justice, Education, Environmental Studies, Geography, Indigenous Studies, Math, Nursing, Physical and Health Education, Psychology, Religions and Cultures, Social Welfare and Social Development, Social Work, Sociology, I do instruction, reference, collection development, etc.

I don't currently employ AI in my current instruction and professional practice, but may consider incorporating aspects of it in future.

....I think too many academic librarians fail to realize that subject expertise is everything when building trust, capacity and share research skills to new and experienced researchers. Without this knowledge librarians serving in STEM and chemistry research areas are too often sidelined or ignored at their peril.